

The diagram illustrates the equilibrium between the open-chain form (I) and the cyclic hemiacetal form (II) of a monosaccharide derivative. Structure I is the open-chain form, showing a vertical chain of atoms: HO-C-CO₂H at the top, followed by CH₂, HCOH, HCNHAc, CH, HCOH, HC, and CH₂OH at the bottom. Structure II is the cyclic form, where the top carbon (C1) is part of a five-membered ring with the oxygen atom at the bottom. The ring consists of C1, C2 (CH₂), C3 (HCOH), C4 (HC), and C5 (CH₂OH). The substituents on the ring are CO₂H at C1, HCNHAc at C2, and HCOH at C3. The chain continues from C4 with HCOH and CH₂OH groups. A double-headed arrow indicates the equilibrium between the two forms.

I.
Unreactive with protein

II.
ketal form
Weakly reactive with protein

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Figure 12: A typical GPC chromatogram for CA fractions

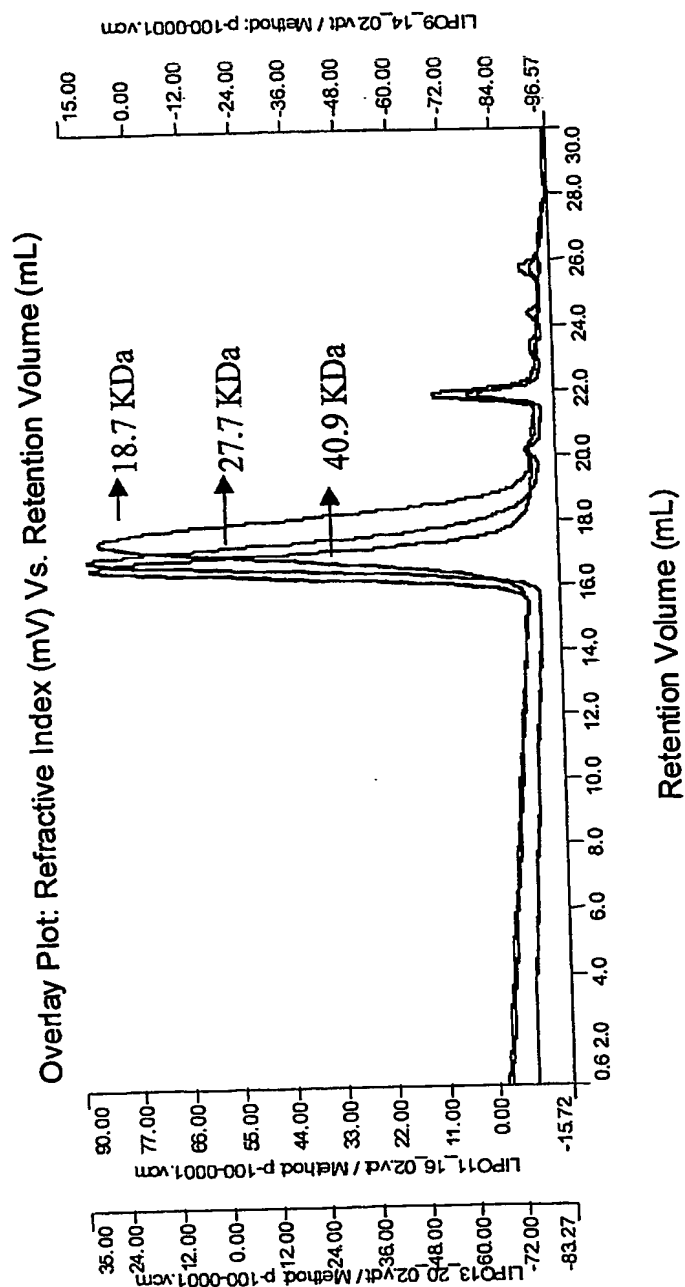


Figure 14: Fractionation by ultrafiltration

